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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/539,343

01/09/2006

Volker Dolle

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EXAMINER

LEE, RIP A

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/539,343	Applicant(s) DOLLE ET AL.	
	Examiner Rip A. Lee	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☒ Claim(s) 3, 4 and 9 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>01-09-2006</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Objections

1. Claims 3, 4, and 9 are objected to because of the following informalities: While the claims not a "use claims" *per se* (*vide infra*), they recite the term "is used." It is not clear how the polypropylene polymers are to be used. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The term "high molecular weight" in claims 1, 3-5, 10 is a relative term which renders the claims vague and indefinite. The term is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Dependent claims 2, 6-9, and 11-14 are subsumed under the rejection.

4. Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims describe a composition made from polymer with a proportion of 2-8 wt % of β -crystallites. Quantification of this component is meaningless unless that value is framed relative to other components in the composition. Therefore, it is not clear what the claim intends to encompass. As such, the scope of the claim is vague and indefinite.

5. Claims 12 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims provide for the use of a molding composition, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 12 and 13 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

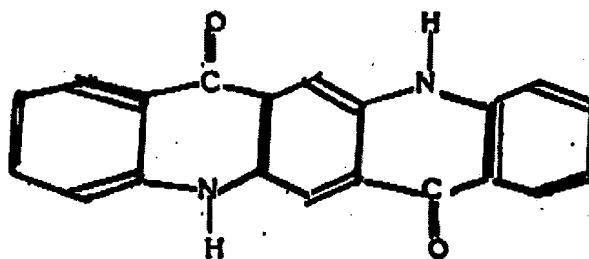
9. Claims 1-8 and 10-14 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Helberg *et al.* (EP 278 470).

The prior art of Helberg *et al.* relates to preparation of polypropylene compositions with nucleating agent. Inventive compositions may contain polypropylene homopolymer or copolymer provided that the melt index is less than 5 g/10 min, and preferably, less than 2 g/10 min (230 °C, 5 kg); col. 2, lines 11-18). A representative embodiment of the invention is shown in example 1, wherein the composition contains polypropylene homopolymer having a melt index of 0.26 g/10 min and 0.001 wt % of quinacridone. The reference does not disclose the properties of the resulting composition in terms of percent β -crystallites, however, in view of the fact that the composition contains substantially the same type of polypropylene and nucleating agent as that recited in the instant claims, a reasonable basis exists to believe that the composition exhibits the claimed property. Since the PTO can not conduct experiments, the burden of proof is shifted to the Applicants to establish an unobviousness difference. *In re Fitzgerald*, 619 F.2d. 67, 205 USPQ 594 (CCPA 1980). See MPEP § 2112-2112.02. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). Compositions are prepared by extrusion, and they are well suited for making pipe (page 3, col. 3, line 14).

10. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Helberg *et al.* in view of Kathan *et al.* (EP 177 961).

Helberg *et al.* discloses the nucleating agent, γ -quinacridone, but there is no further description of the structure of this material. Helberg *et al.* cites DE-AS 1 188 279 as the reference for information on this material. The same reference appears in Kathan *et al.* (EP 177 961 A2), cited as DE-PS 1 188 279 (page 2, line 1). The relevant passage from the Kathan *et al.*, reproduced below for convenience, reveals that the structure of γ -quinacridone is the γ -phase of linear trans-quinacridone.

Aus der DE-PS-1 188 279 geht weiters hervor, daß durch Zusatz von 0,0005 bis 0,005 Prozent-Masse der gamma-Phase des linearen trans-Quinacridons der Formel



Thus, it would have been obvious to one having ordinary skill in the art to use this compound as the γ -quinacridone nucleating agent because the prior art teaches this particular material is useful as a b-nucleating agent for polypropylene resin. The combination is obvious because Helberg *et al.* teaches its use, but not its structure, and Kathan *et al.* provides the obvious missing element.

11. Claims 1, 3, and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wolfswenger *et al.* (U.S. 5,681,922).

Example V1 of Wolfswenger *et al.* discloses a polypropylene homopolymer having a melt index of 0.3 g/10 min (ISO 1133, 230 °C, 2.16 kg) and having a proportion of 1 % of β -crystallites. The deficiency of the prior art is that it discloses a proportion of 1 % of β -crystallites, while the present claims require 2 % of β -crystallites. It is apparent, however, that the instantly claimed amount of 2 % and that disclosed Wolfswenger *et al.* art are so close to each other that the fact pattern is similar to the one in *In re Woodruff*, 919 F.2d 1575, 16

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USPQ2d 1934 (Fed. Cir. 1990) or *Titanium Metals Corp. of America v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985) where, despite a slight difference in the ranges, the court held that such a difference did not “render the claims patentable,” or, alternatively, that “a *prima facie* case of obviousness exists where the claimed range and prior art range do not overlap, but are close enough so that one skilled in the art would have expected them to have the same properties.”


In light of the case law cited above, and given that there is only a slight difference between the amount of 1 % disclosed by the prior art and the amount disclosed in the present claims and further, given the fact that no criticality is disclosed in the present invention with respect to the amount of 2 %, it would have been obvious to one of ordinary skill in the art that the amount of 1 % recited in the present claims is but an obvious variant of the amounts disclosed in the prior art, and accordingly, one of ordinary skill in the art would have arrived at the claimed invention.

Whereas the melt index reported in the reference is carried out using a load of 2.16 kg, the claims indicate use of 5 kg. However, a reasonable basis exists to believe that the same material tested for melt index at the cited load of 5 kg, exhibits a melt index that lies in the range cited in the instant claims. Since the PTO can not perform experiments, the burden is shifted to the Applicants to establish an unobviousness difference. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rip A. Lee whose telephone number is (571)272-1104. The examiner can be reached on Monday through Friday from 9:00 AM - 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached at (571)272-1114. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <<http://pair-direct.uspto.gov>>. Should you have questions on the access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).


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October 29, 2007